Title: EFFECTIVENESS OF PREANESTHETIC INSTRUCTIONS ON POSTOPERATIVE PHYSIOLOGICAL RECOVERY

Authors: H.L. Bennett, Ph.D. & E. A. Disbrow, M.A.

Affiliation: Department of Anesthesiology, University of California, Davis, Davis CA 95616.

INTRODUCTION. The preanesthetic interview has successfully directed the physiological behavior of surgical patients (1). In contrast to an instructional model, a reassurance model has no physiological benefit (2). In this study we compared the return of intestinal function following GI surgery in patients who received specific instructions for early return of postoperative GI motility with patients receiving an equal length control interview. Barber's review (3) led to our presenting direct, physiological suggestions in a believable manner to an attentive and motivated patient (4,5).

METHOD. Forty patients ASA I-II, aged 18-65 yrs., scheduled for elective abdominal surgeries with expected postoperative ileus participated. Human Subjects Review Committee approval and informed consent were obtained. After selection by a GI nurse, patients were randomly assigned to control or instruction groups. The evening before surgery the control group received reassurance about their surgical team and spirometer instructions for clearing the lungs postoperatively. The experimental condition received specific instructions for the early return of bowel motility (scripts available upon request). The preanesthetic presentation of the instructions required four minutes.

Patients were interviewed postoperatively only after the first passage of flatus indicating resolution of ileus (6). Other GI function data was collected by a floor nurse who was blind to the subject's condition. Extent of surgical bowel manipulation was independently rank ordered by a GI surgeon. The postoperative interview was identical for both conditions. The Stanford Hypnotic Clinical Scale (7) was administered to assess responsiveness to suggestion (0-5, increasing ability).

RESULTS. An analysis of covariance was performed using time to first flatus (TTFF) as the dependent variable and preanesthetic interview as the independent variable. Amount of postoperative narcotics and rank of surgical insult to the bowel were used as covariates. Narcotics were converted to morphine equivalents (8). The suggestion condition differed significantly from controls with regard to TTFF $F(1,36) = 11.10$, $p < .05$: Instruction= 2.6 days (SD=1.6 days); vs. control= 4.2 days (SD=2.4 days) postoperative ileus. A discriminant function analysis of 9 expected biomedical variables found instructional condition (p<.02), hypnotic ability (p<.05) and amount of postoperative narcotics (p<.02) to account for 44% of the between groups variability.

DISCUSSION. The resolution of ileus was significantly related to the presentation of direct instructions for postanesthetic behavior in a specified autonomic system. The preanesthetic interviewer can efficiently instruct patients through direct suggestion and achieve significant physiological benefits. The current reassurance model of preanesthetic interviewing is ineffective.

REFERENCES.
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Table 1: Determinants of postoperative ileus resolution

Variable.	r	Significance
Hypnotic ability:	-.32	p<.05
Instructional cond.:	.36	p<.02
Postop. narcotics:	.37	p<.02

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TITLE: START DATE OF ANESTHESIOLOGY TRAINING: EFFECT ON ACADEMIC AND CLINICAL PERFORMANCE

AUTHORS: C.L. FURGERSON, M.D., M.F. RHOTON, Ph.D.

INSTITUTION: The Cleveland Clinic Foundation; Cleveland, Ohio

Two groups of residents (JAN & JUL) begin training each year in our program. We compared mean academic and clinical performance scores of the groups to determine if JAN performance of was better than JUL because of 6 months of additional training prior to each exam.

All residents received the same orientation lectures, basic science (BAS) and clinical management conferences (CON) and OR instruction. 550 clinical evaluation and written exam scores for 48 CA1 and CA2s were collected for 2 years. Test scores were: ABA Intraining exam (ITE); Anesthesia Knowledge Test-6 (AKT-6); departmental BAS and CON exams. Clinical knowledge (CKNOW) was evaluated daily using the CASE method. [1] Cumulative evaluations were used to calculate CKNOW scores. JAN & JUL performance was compared by year of training for exam scores alone and for correlation with CKNOW at the time of exam.

There was no significant difference between JAN & JUL exam scores (Fischer's z-test; p<.05)(Table 1). This contrasts with another study [2] which showed significant correlations between ITE and months in training. There was a significant correlation between ITE and CON for both groups (Table 1). This correlation suggests that JAN is ahead of JUL in acquiring knowledge about clinical management protocols. Some of this knowledge is tested by ITE, but the overlap is insufficient to produce significant differences in ITE scores. Correlations were not significant between CKNOW and exam scores for either group. We had expected better CKNOW scores and higher correlations between CON/ CKNOW for JAN. It appears that CKNOW reflects the ability to apply knowledge in the clinical setting and is not evaluated by objective exams. Apparently this capability is not fully developed until late in residency and is not significantly influenced by the 6 month difference in training.

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Table 1
DESCRIPTIVE STATISTICS AND COMPARISON TEST
FOR EXAMS, JAN VS. JUL

EXAM	N		MEAN		SD		p		CKNOW z		CON z	
	CA-1	CA-2	CA-1	CA-2	CA-1	CA-2	CA-1	CA-2	CA-1	CA-2	CA-1	CA-2
ITE												
JAN	20	11	266	413	107	162						
JUL	36	36	311	401	102	79	0.106	0.41	-.024	-.082	2.620*	2.34*
AKT												
JAN	20		480		101							
JUL	37		481		95		0.900		0.25		1.940	
BAS												
JAN	20	12	63	68	11	7						
JUL	37	36	62	62	8	10	0.883	0.11	1.6	0.36	0.772	-.722
CON												
JAN	20	12	52	48	18	22						
JUL	37	36	53	59	15	20	0.804	0.12	-.031	0.92	--	--

*Significant p value (p < .05); Fisher's z test statistic used, Pearson correlation. Refer to text for explanation of abbreviations.